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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

OTTO, JR, PAUL R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,841	Applicant(s) ROSENBAUM, WALTER	
	Examiner PAUL OTTO, JR	Art Unit 4146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18 is/are rejected.
- 7) ☒ Claim(s) 3-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/17/2006, 9/8/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant filed a preliminary amendment to the claims canceling claims 16, 17, and 19. Claims 1-15 and 18 are pending.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "series 14" in line 3. For examination purposes the examiner is assuming that "14" is unneeded and the sentence should end with "series." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference characters 24, 26, 106, and 110. For examination

purposes the examiner is assuming that they are omitted. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "42" has been used to designate both a polling device (page 4 line 21) and an image (page 5 line 3). For the purposes of examination 42 is assumed to be a polling device. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

“Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 3-15 are objected to because of the following informalities: Claim 3 is dependent on itself and claims 4-15 are dependent from 3.

Claim 3 is assumed to be dependent from claim 1 for examination purposes. Appropriate correction is required.

Claim 4 is objected to because it is a duplicate of claim 3. Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15 and 18 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the “machine or transformation test”, whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility (See *Benson*, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See *Flook*, 437 U.S. at 590”). While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform an article nor positively tie to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. That is the claim methods are not tied to a particular machine and because a human could perform all of the processes tasks. For example a human could perform the function of optical character recognition as given in claim 1 and claim 18.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5455872 to Bradley, herein after "Bradley1".

As to claim 1: Bradley1 discloses "A method of decoding images comprising the steps of: applying in parallel at least a first and a second optical character recognition process to an image, **(Bradley1; column 4, lines 50-53, figure 1 elements 104, 110)** said image including a plurality of categorizations, **(Bradley1; column 7, lines 9-12; the field type is a category from the image which is determined in figure 2A elements 204, 206, and 208, where it is retrieved from the form ID, column 7 lines 5-7)** determining if said first and second optical character recognition processes produce a substantially similar image result, **(Bradley1; column 4, lines 65-67, figure 1 element 122)** - if said image result is not similar, select a highest weighted OCR process categorization based result **(Bradley1; column 3 lines 15-17; where the OCR engine choice confidence factor is synonymous with the weighted OCR process since the confidence factor values differ between OCR processes which shows the result as "not similar"; the reference discloses in column 2 lines 61-65 that the field type category is used to determine the results)**, and assigning said highest weighted OCR process categorization based result to said image result on a categorization by categorization basis **(Bradley1; column 3 lines 15-17;**

where the engine choice confidence factor is calculated in part using the field type category column 6, lines 12-16).

As to claim 18: Bradley1 discloses, a method of decoding images comprising the steps of: applying in parallel at least a first and a second optical character recognition process to an image, **(Bradley1; column 4, lines 50-53, figure 1 elements 104, 110)** said image including a plurality of categorizations, **(Bradley1; column 7, lines 9-12; the field type is a category from the image which is determined in figure 2A elements 204, 206, and 208, where it is retrieved from the form ID, column 7 lines 5-7)** determining if said first and second optical character recognition processes produce a substantially similar image result, **(Bradley1; column 4, lines 65-67, figure 1 element 122)** if said image result is not similar, manually encode the image, **(Bradley1; column 3 lines 23-26)** statistically updating a weight of an OCR process based upon image encoding. **(Bradley1; column 3 lines 37-42; the reference discloses in column 10 lines 9-12 that “error statistics” are used to update the weight).**

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A.) Claims 2-4 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley1 as applied to claim 1 above, in view of U.S. Patent No. 5697504 to Hiramatsu, herein after "Hiramatsu1".

As to claim 2: Bradley1 does not disclose that "wherein at least one of said categorizations is directed to identification of an envelope upon which said image is printed".

Hiramatsu1 discloses "wherein at least one of said categorizations is directed to identification of an envelope upon which said image is printed" **(Hiramatsu1; column 4 lines 40-49; the video coding apparatus uses "attribution information" such as "classification of a postcard/envelope" where attribution information is read to mean category).**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to combine the teachings of Bradley1 to the system of Hiramatsu1 because they are analogous in character recognition.

One ordinary skilled in the art would have been motivated to combine the teaching of Hiramatsu1 to that of Bradley1 in order "to provide a video coding system which allows the operator to perform a coding operation efficiently and tirelessly within a short period of time. **(Hiramatsu1; column 1 lines 49-52)**

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As to claim 3: The combination of Bradley1 and Hiramatsu1 discloses, wherein said at least one categorization is directed to whether said image is handwritten or machine printed. **(Hiramatsu1; column 4 lines 40-49; the video coding apparatus uses “attribution information” such as “classification of handwriting/printing” where attribution information is read to mean category. Printing is read to mean machine printed since column 13 lines 39-43 refer to printing being performed by a wordprocessor. Figure 2 also between handwritten and printed which is described in column 3 lines 66-67.)**

As to claim 4: the combination of Bradley1 and Hiramatsu1 discloses, wherein said at least one categorization is directed to whether said image is handwritten or machine printed. **(Hiramatsu1; column 4 lines 40-49; the video coding apparatus uses “attribution information” such as “classification of handwriting/printing” where attribution information is read to mean category. Printing is read to mean machine printed since column 13 lines 39-43 refer to printing being performed by a wordprocessor. Figure 2 also between handwritten and printed which is described in column 3 lines 66-67.)**

As to claim 10: the combination of Bradley1 and Hiramatsu1 discloses, “wherein said at least one categorization is directed to whether said image is

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printed on a flat mail piece or a regular mail piece” (**Hiramatsu1; column 4 lines 40-49; the video coding apparatus uses “attribution information” such as “classification of a postcard/envelope”. For the purposes of examination the examiner is interpreting “flat mail piece” and “regular mail piece” to be types of envelopes.**).

As to claim 11: the combination of Bradley1 and Hiramatsu1 discloses, “wherein said at least one categorization is directed to numerics.” (**Bradley1; column 7, lines 9-12; the field type category can be numeric**)

As to claim 12: The combination of Bradley1 and Hiramatsu1 discloses “wherein said at least one categorization is directed to letters.” (**Bradley1; column 7, lines 9-12; the field type category can be alphabetical**).

As to claim 13: The combination of Bradley1 and Hiramatsu1 discloses, “wherein said at least one categorization is directed to flats” (**Hiramatsu1; column 4 lines 40-49; the video coding apparatus uses “attribution information” such as “classification of a postcard/envelope”. For the purposes of examination the examiner is interpreting “flats” to be a type of envelope.**)

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B.) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bradley1 and Hiramatsu1 as applied to claim 3 above, in view of U.S. Patent No. 5737438 to Zlotnick, herein after "Zlotnick1".

As to claim 5: The combination of Bradley1 and Hiramatsu1 do not disclose that "wherein said at least one categorization is directed to identifying a background of color of said envelope".

Zlotnick1 discloses "wherein said at least one categorization is directed to identifying a background of color of said envelope." (**Zlotnick1; column 2, lines 35-36**).

It would have been obvious to one of ordinary skilled in the art at the time of the invention to use the teachings of Zlotnick1 with the teachings of the combination of Bradley1 and Hiramatsu1 because they are analogous in mail processing.

One of ordinary skilled in the art would have been motivated to combine the teaching of Zlotnick1 to that of the combination of Bradley1 and Hiramatsu1 because by locating the label on the image of the parcel will "avoid the processing of the whole of the image of the parcel" (**Zlotnick1; column 1 lines 27-31**) which will increase the efficiency of the processing.

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C.) Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bradley1 and Hiramatsu1 as applied to claim 3 above, in view of U.S. Patent No. 5025475 to Okabe, herein after “Okabe1”.

As to claim 6: The combination of Bradley1 and Hiramatsu1 do not disclose that “wherein said at least one categorization is directed to whether said envelope is a window or non-window envelope.”

Okabe1 discloses “wherein said at least one categorization is directed to whether said envelope is a window or non-window envelope” (**Okabe1; column 3 lines 14-19; the detection result of element 20b is a category of whether the envelope is a window or non-window envelope; column 3 lines 60-67; the W/L signal indicates the presence of a window**).

It would have been obvious to one of ordinary skilled in the art at the time of the invention to use the teachings of Okabe1 with the teachings of the combination of Bradley1 and Hiramatsu1 because they are analogous in mail processing.

One ordinary skilled in the art would have been motivated to combine the teaching of Okabe1 to that of the combination of Bradley1 and Hiramatsu1 to

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reduce the OCR processing time “because when the front surface or the back surface of a piece of mail is not determined because of the absence of a postage stamp, the mail characters must be read and discriminated on both the surfaces of the mail.” **(Okabe1; column 1 lines 28-31).**

As to claim 7: The combination of Bradley1, Hiramatsu1 and Okabe1 discloses, “wherein said at least one categorization is directed to whether said image is an address with or without a post code.” **(Okabe1; column 3 lines 7-10; the detection result of elements 9a and 9b is a category of whether the envelope has a post code where post code is read as stamp.)**

D.) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bradley1 and Hiramatsu1 as applied to claim 3 above, in view of U.S. Patent No. 5278920 to Bernzott, herein after “Bernzott1”.

The combination of Bradley1 and Hiramatsu1 do not disclose that “wherein said at least one categorization is directed to whether said image is skewed”.

Bernzott1 discloses “wherein said at least one categorization is directed to whether said image is skewed” **(Bernzott1; figure 2c block 221. Bernzott1 categorizes the amount of image skew to use in performing the character recognition column 15 lines 32-40).**

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It would have been obvious to one of ordinary skilled in the art at the time of the invention to combine the teachings of Bernzott1 with the combination of Bradley1 and Hiramatsu1 because they are analogous in OCR recognition.

One ordinary skilled in the art would have been motivated to combine the teaching of Bernzott1 to that of the combination of Bradley1 and Hiramatsu1 in order “to develop an optical character recognition system which allows for recognition of any number of typefaces while still allowing for the rapid processing of documents.” **(Bernzott1; column 2 lines 1-4).**

E.) Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bradley1 and Hiramatsu1 as applied to claim 3 above, in view of U.S. Patent No. 4845761 to Cate, herein after “Cate1”.

As to claim 9: The combination of Bradley1 and Hiramatsu1 do not disclose that “wherein said at least one categorization is directed to whether said envelope is glossy.”

Cate1 discloses “wherein said at least one categorization is directed to whether said envelope is glossy” **(Cate1; column 6 lines 5-7; where the cells can identify the entire envelope as a high region of reflectivity as shown in figure 6).**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to use the teachings of Cate1 with the teachings of the combination of Bradley1 and Hiramatsu1 because they are analogous in mail processing.

One ordinary skilled in the art would have been motivated to combine the teaching of Cate1 to that of the combination of Bradley1 and Hiramatsu1 for an efficiency increase since “when the addressee's name and address are uniquely located on a mail item, reading of this information is enhanced for the sorting procedure.” **(Cate1; column 1 lines 19-22).**

F.) Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bradley1 and Hiramatsu1 as applied to claim 3 above, in view of U.S. Patent Publication No. US 2002/0172399A1 to Poulin, herein after “Poulin1”.

As to claim 14: The combination of Bradley1 and Hiramatsu1 do not disclose that “wherein said at least one categorization is directed to an inward sorting process”.

Poulin1 discloses “wherein said at least one categorization is directed to an inward sorting process” **(Poulin1; [0023] where inward is read to be incoming mail center).**

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Poulin1 with the teachings of the combination of Bradley1 and Hiramatsu1 because they are analogous in mail processing.

One ordinary skilled in the art would have been motivated to combine the teaching of Poulin1 to that of Bradley1 for “a method and architecture for improving the efficiency with which postal personnel and equipment are utilized.” **(Poulin1; [0018])**.

As to claim 15: The combination of Bradley1 and Poulin1 discloses “wherein said at least one categorization is directed to an outward sorting process” **(Poulin1; [0023] where outward is read to be outgoing mail center)**.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. U.S. Patent Publication No. 20020168090 to Bruce. Bruce discloses in [0008] subimage detection that can be used to categorize areas of the envelope such as windows, addresses and stamps.

- b. U.S. Patent 6377698 to Cumoli. Cumoli discloses color classification in column 1 lines 50-49.
 - c. U.S. Patent No. 5519786 to Courtney. Courtney discloses parallel OCR process with weighting.
 - d. U.S. Patent Publication No. 20040197009 to Belkacem. Belkacem discloses multiple OCR recognition with address recognition.
 - e. U.S. Patent No. 6987863 to Rauh. Rauh discloses multiple categorization categories in column 5 lines 60-67.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL OTTO, JR whose telephone number is (571)270-3391. The examiner can normally be reached on Monday - Thursday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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/PAUL OTTO, JR/
Examiner, Art Unit 4146
4/2/2009

/ANAND BHATNAGAR/
Primary Examiner, Art Unit 2624
April 9, 2009